

Shaping up with CSS

SI539 - Lloyd Chapter 4

These slides intended for use with the text book, “Building your Own Web Site the Right Way Using HTML & CSS” by Ian Lloyd, and Available from Sitepoint books.

Quick Advertisement - Firefox

- You pretty much need to use Firefox for serious website development
- Important plugins:
 - Web Developer - Chris Pedrick
 - FireBug - Joe Hewitt

<http://addons.mozilla.org/>

dr-chuck.com

http://www.dr-chuck.com/

Latest Headlines Sakai dr-chuck.com NWA Chuck's Media Sakai Based Service... iPhone Navigation Personal Learning an...

Disable Cookies CSS Forms Images Information Miscellaneous Outline Resize Tools View Source Options

Charles Severance

Quick Links

Chuck's TV and Media

Chuck's Talks

Chuck's Book

Chuck's Columns

Resume and Bio

Blog (26-Nov 11:44)

Chuck's Papers

UM School of Information

Sakai Planet Blog

More of dr-chuck's photos

www.flickr.com

This site contains a bunch of stuff including software, tele... miscellaneous material. This also includes a number of activities and s... my good friend Richard Wiggins.

Recent Video: John Merlin Williams Goes Street Racin

Recent Video: Dr. Chuck Goes Motocross Racing on hi

Teaching

SI 182 - Building Applications for Information Environments

SI 539 - Design of Complex Web Sites (Rails)

SI 543 - Introductory Programming (Java) (Login)

See also www.rubylearn.com and my raw course podcasts

Web/Multimedia sites

A Film About Brent and His ATV

How to Install a hardwood floor in 4 minutes!

Dr. Chuck goes motocross racing (2007)

Dr. Chuck goes stock car racing (2002)

Audition Tape which we sent to TechTV which was rejected :(.

Making a Simple Cartoon Three short animations from Chuck and Brent.

Nuthin' But Net A Television show

NewsTalk 870 - Rich and I were on the radio once per month from the mid 90's through 2004.

More Multimedia Projects...

Software Tools

PHP Image software for v300 and Treo-600 SMS

ClipBoard-2000 - Distance Education Software

Sync-O-Matic 2000 - Distance Education Software

Other software Tools

Projects

Practical Home Networking - A book that Chuck and Rich almost got written. (Version 1,

Outline Frames

Outline Headings

Outline Links

Outline Tables

Outline Block Level Elements

✓ Outline Deprecated Elements

Outline Positioned Elements

Outline Current Element

Outline Custom Elements...

✓ Show Element Names When Outlining

Sakai Planet Blog

Produced: June 6, 2006 This video was taped while are the Sakai meeting in Vancouver. Johan discusses their upcoming project to integrate uPortal and Sakai to produce the UNISA campus portal. Johan attended both the Sakai and JA-Sig meetings and described the UNISA approach to both communities. Details: 3 minutes, Windows Media 300 kbps.

This is a randomly selected show


Done

Personal Learning and Reflection Environment

http://localhost:3000/portal/index/1

Latest Headlines Sakai dr-chuck.com NWA Chuck's Media Sakai Based Service... iPhone Navigation Personal Learning an...

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Toozday Personal Learning Environment (11.0)

You are logged in as admin (logout)

All Sites My Profile Current Site: Fun Wiki Comments

The wiki page named Main in site Fun does not exist. Wiki links are words surrounded by square brackets like SubPage.

Edit

</ajax.1.primary-content/wiki/view>

Recent Comments

Most excellent.
By admin | 26 Nov 2007 12:09PM | [view](#)

[Add Comment](#) | [Manage](#)

Inspect Edit body < html

Console HTML CSS Script DOM Net Options

```
<a id="content-target" class="skip" name="content-target">Content
begins here</a>
<div id="primary-content">
  <div class="wiki-content">
    <p>
      <div class="primary-content-current">/ajax.1.primary-content
    </div>
  <div id="right-content">
```

Style Layout DOM Options

```
body {
  font-family: "Helvetica
  Neue",Helvetica,Geneva,Arial,sans-serif;
  font-size: 0.85em;
  margin: 0pt;
  padding: 0pt;
}
```

Done

Two kinds of elements

- Inline - affects how text looks
 - strong, span
- Block - Containers that can be laid out
 - Paragraphs, etc
- CSS can change a tag from inline to block

```
#navigation li {  
  display: inline;  
}
```


Inline Elements

- Flowed with other text
- span, em, strong, cite, a
- Inline tags can be nested as long as they match
 - `<cite>Stuff</cite>`
- Block can contain inline - but inline cannot contain block

Viewing Block Level Elements

- Change the CSS to add a border
- Firefox plugin - Web Developer
- <https://addons.mozilla.org/>

```
#mast-head{  
    border: 1px dashed gray;  
    clear: both;  
    height: 100%;  
    overflow: hidden;  
}
```


 **Toozday Personal Learning Environment (11.0)** Name: Password:

Welcome to the Fall 2007 SI 539 Project.

You can login if you previously created an account. To create a new account, press "Login" and then "New Account". Make an account with a login of "admin" to administer the system.

For good time, try out the new [iPhone look portal](#).

Sorry about the CSS - perhaps someone will clean it up and make it look prettier. /Chuck

The portal shows two tools at a time using Ajax and they operate independently. Site tools work within the context of that site.

ple-style-wireframe.css

```
#mast-head #login-header form input[type=submit]{
    border: 1px solid #b44;
    color: #b44;
    padding: 1px;
}
```

Dr. Chuck's Interactive Personal Portfolio

http://www.dr-chuck.com/

Sakai dr-chuck.com NWA Chuck's Media iPhone Navigation I3k CT SI 182 Sakai Based Service : ...

Disable Cookies CSS Forms Images Information Miscellaneous Outline Resize Tools View Source Options

This site contains a bunch of stuff including software, television shows, and miscellaneous material. This also includes a number of activities and projects done with my good friend Richard Wiggins.

New Video: Dr. Chuck's Ruby Lecture from Universidad Politécnica de Valencia (www.upv.es).

Recent Video: Dr. Chuck Goes Motocross Racing on his Suzuki

Quick Links

- Chuck's TV and Media
- Chuck's Talks
- Chuck's Book
- Chuck's Columns
- Resume and Bio
- Blog (29-Jan 12:10)
- Chuck's Papers

UM School of Information

Sakai Planet Blog

Chuck's Twitter

Good week - the MLK holiday and code weekend ended up with about 30 hours working on Sakai - got some stuff done and more stuff started. 1 day ago

iPhone make slow motion grocery shopping survivable. 1 day ago

Teaching

- SI 182 - Building Applications for Information Environments
- SI 539 - Design of Complex Web Sites (Ralls)
- SI 543 - Introductory Programming (Java) (Login)

See also www.rubylearn.com and my raw course podcasts

Web/Multimedia sites

- A Film About Brent and His ATV
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- Dr. Chuck goes motocross racing (2007)
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- More Multimedia Projects...

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- PHP Image software for v300 and Treo-600 SMS
- ClipBoard-2000 - Distance Education Software
- Sync-O-Matic 2000 - Distance Education Software
- Other software Tools

Projects

- Practical Home Networking - A book that Chuck and Rich almost got written. (Version

Outline

- Outline Frames
- Outline Headings
- Outline Links
- Outline Tables
- Outline Block Level Elements**
- Outline Deprecated Elements
- Outline Positioned Elements
- Outline Current Element
- Outline Custom Elements...

Show Element Names When Outlining

Applications for Information Environments

SI182 is a new undergraduate programming course focused on learning how to program to analyze data. The course will be taught in Python. For more information see www.si182.com.

This is a randomly selected show from our library of shows - more shows will be added as they are digitized. You can view the entire collection here.

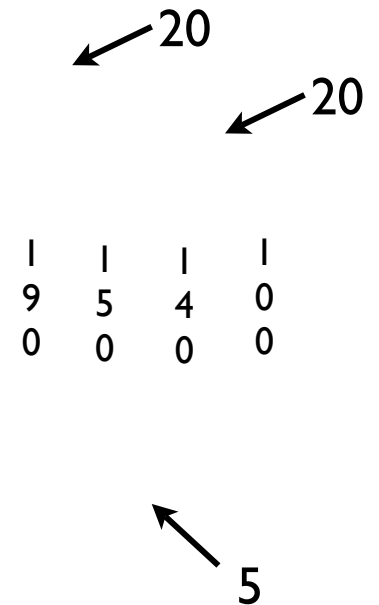
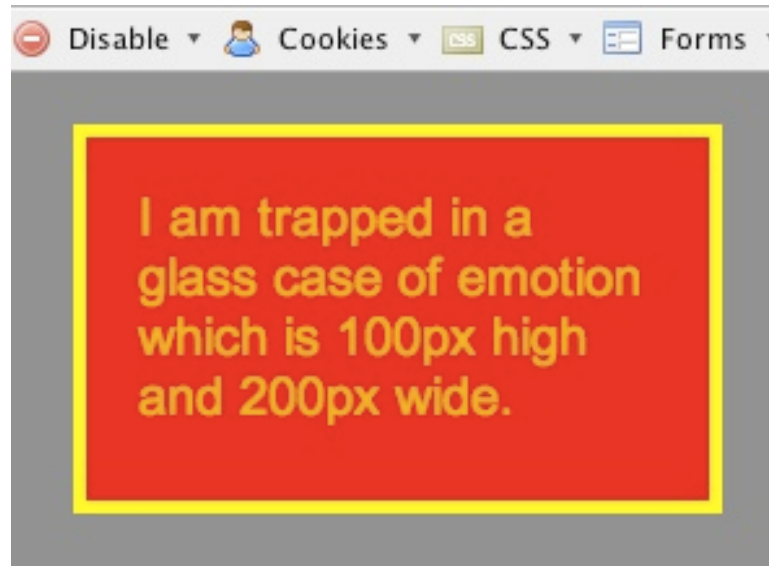
Done

CSS Box Model

- height and width properties size the block element
- margin properties define the space around the block element
- border properties define the borders around a a block element
- padding properties define the space between the element border and the element content
- background properties allow you to control the background color of an element, set an image as the background, repeat a background image vertically or horizontally, and position an image on a page

```
.trapped {
  height: 100px;
  width: 200px;
  margin: 20px;
  border: 5px solid yellow;
  background:red;
  padding: 20px;
  font-family:Arial;
  color:orange;
  font-size:20px;
}
```

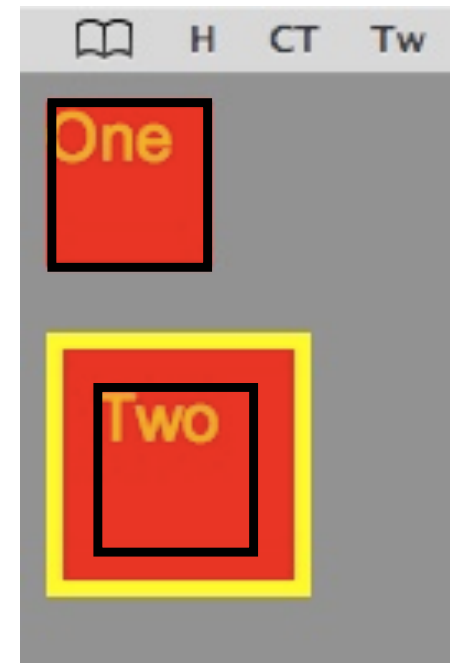
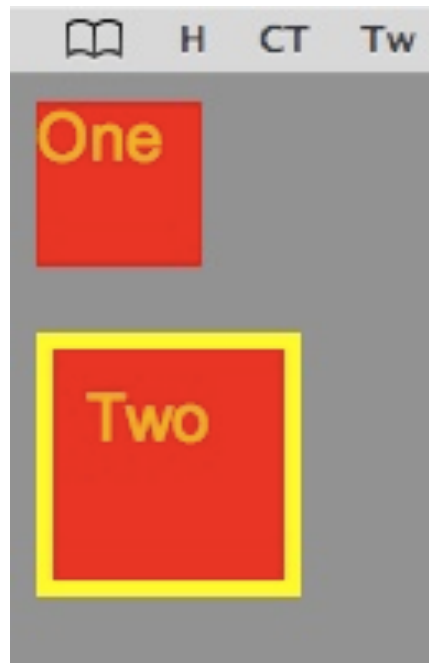
```
<p class="trapped">
I am trapped in a glass case of emotion
which is 100px high and 200px wide.
</p>
```



The Box Model

```
.trapped {  
  height: 50px;  
  width: 50px;  
}  
.trapped2 {  
  height: 50px;  
  width: 50px;  
  border: 5px solid yellow;  
  padding: 10px;  
}
```

```
<p class="trapped">  
One</p>  
<p class="trapped2">  
Two</p>
```



Border, padding, and margin are additive.

More Box Model

```
.trapped {  
  overflow: hidden;  
  margin: 2px 3px 4px 5px;  
  margin-left: 4px;  
  padding: 7px, 8px, 9px, 10px;  
  padding-top: 14px;  
  border-top: 1px solid yellow;  
  border-right-color: yellow;  
  border-bottom-style: dashed;  
  border-left-width: px;  
}
```

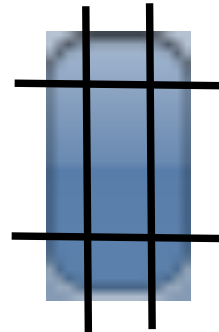
- overflow - hidden, scroll, or visible (default)
- border-style - none, hidden, dotted, dashed, solid, double, groove, ridge, inset, outset
- Don't memorize these - Google "CSS Cheat Sheet"

<http://www.w3.org/TR/REC-CSS2/box.html>

Images in Block Elements

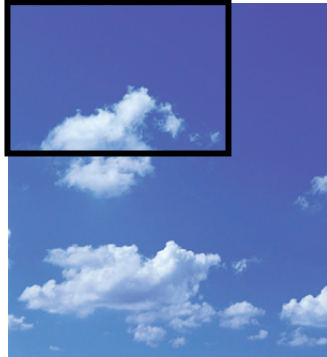
- You can place background images in CSS block elements
- Some browsers get really tricky with images beyond the basic standards - so be careful

```
-webkit-border-image:  
  url(iPhoneButton.png) 0 5 0 5;  
-webkit-border-radius: 0;
```

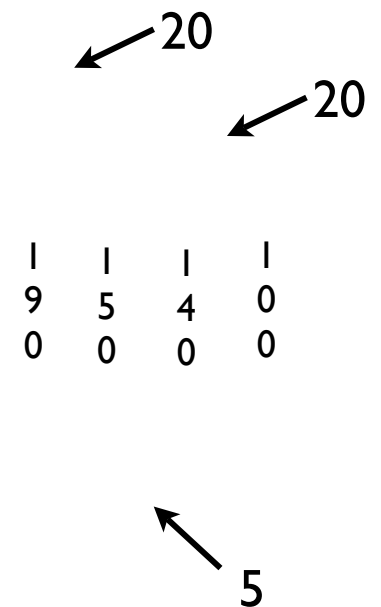
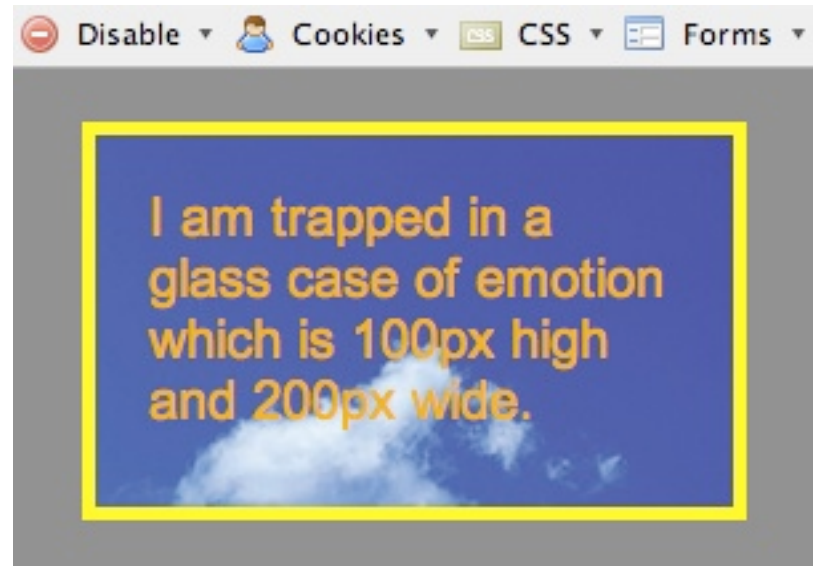


My Workspace		Logout
My Sites		>
My Profile		>
User Setup		>
Site Setup		>
Thanks to joehe Witt.com		>

My Workspace		Logout
My Sites		>
My Profile		>
User Setup		>
Site Setup		>
Thanks to joehe Witt.com		>



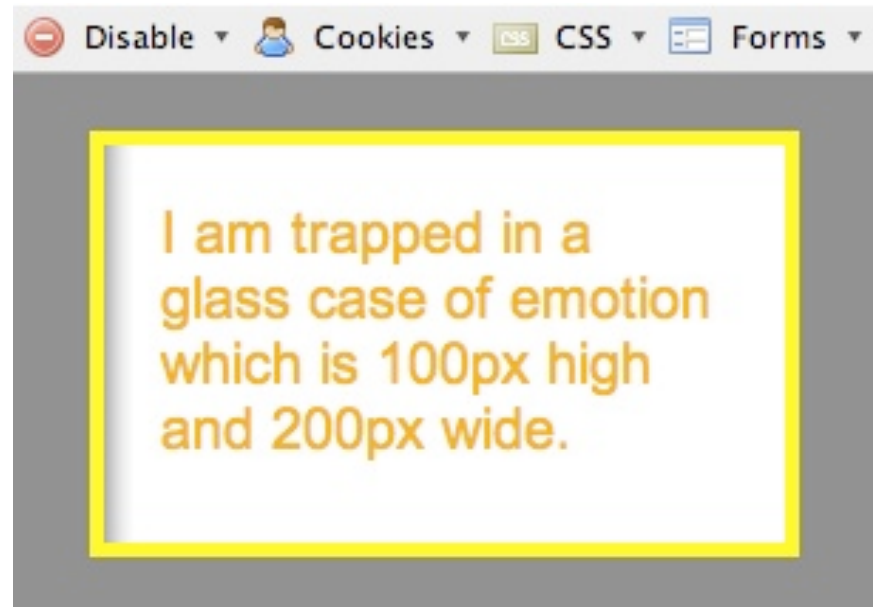
```
.trapped {
  height: 100px;
  width: 200px;
  margin: 20px;
  border: 5px solid yellow;
  background:red;
  padding: 20px;
  font-family:Arial;
  color:orange;
  font-size:20px;
  background-image: url(BlueSkyLarge.jpg);
}
```



Images overlay Background



```
.trapped {  
  height: 100px;  
  width: 200px;  
  margin: 20px;  
  border: 5px solid yellow;  
  background:white;  
  padding: 20px;  
  font-family:Arial;  
  color:orange;  
  font-size:20px;  
  background-image: url(gray-right-grad.gif);  
  background-repeat: repeat-y;  
}
```



Repeating Images

Layout

- Layout approach - what happens on resize?
- Absolute versus Relative position
- Width - absolute versus percentage

myworkspace@ctools.umich.edu
Logout

My Workspace | SI 539 002 F07 | SI 543 001 F07 | SI 182 | SI 539 |
more sites

Home
Message of the Day
Options

Worksite Setup
Membership
Schedule
Announcements
Resources
News
Web Content
Preferences
Help

Open CourseWare Speaker's Series

November 29, 4:00pm - 1110 Ford Classroom, Weill Hall, Gerald R. Ford School of Public Policy.
Open CourseWare: Surprises and More Surprises When You Open Up Your Teaching Materials to the World.

Professor Shigeru Miyagawa from MIT will talk about his experiences as a member of the original MIT committee that proposed Open CourseWare in 1999.

Get Help Now! - IM CTools Support

Contact "ctoolshelp" via Yahoo! Messenger, AOL, or iChat: Monday through Friday, 10 am to 3 pm.

Charles Severance

myworkspace@ctools.umich.edu
Logout

My Workspace | SI 539 002 F07 | SI 543 001 F07 | SI 182 | SI 539 |
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Charles Severance

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> Programmer Manual
> Features List

LATEST NEWS
Sakai Newsletter October 18, 2007
McGraw-Hill Higher Education and Etudes Form Alliance
MUSE: University of Melbourne Sakai Pilot
Sakai Newsletter October 4, 2007
Sakai Board: Call for Nominations
Read the Newsletter
The Sakai Community

Download the Latest Release
2.4.1 Release
Sakai Overview
About Sakai video
About Sakai PowerPoint
Get Involved
Join our open mail lists
Collaborate using Sakai
View the Project Wiki
Read the latest sakai-dev email
Conference Presentations
Amsterdam, NL (June 2007)
Atlanta, GA (Dec 2006)
Vancouver, BC (May 2006)

Upcoming Events
8th Sakai Conference
Newport Beach Marriott Hotel and Spa
Newport Beach, CA, USA
Tues-Thur, 4-6 Dec. 2007
Pre-conference sessions, Mon, 3 Dec. 2007
Post-conference sessions, Fri, 7 Dec. 2007

Sakai
Collaboration and Learning Environment for Education
free to use, free to develop, freedom for education
Español
SEARCH
search all sites

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The Sakai Community
> Sakai Foundation
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> Commercial Affiliates
Downloads and Resources
> Latest Release
> Release Docs
> Programmer Manual

LATEST NEWS
Sakai Newsletter October 18, 2007
McGraw-Hill Higher Education and Etudes Form Alliance
MUSE: University of Melbourne Sakai Pilot
Sakai Newsletter October 4, 2007
Sakai Board: Call for Nominations
Read the Newsletter
The Sakai Community

Positioning


- static - Default. Place the element in the normal flow of the page gives it (a static element ignores any top, bottom, left, or right declarations)
- relative - An element with position: relative moves an element relative to its normal position, so "left:20" adds 20 pixels to the element's LEFT position
- absolute - An element with position: absolute is positioned at the specified coordinates relative to its containing block.
- fixed - An element with position: fixed is positioned at the specified coordinates relative to the browser window.

http://www.w3schools.com/css/pr_class_position.asp

Relative Position

```
<html>
<head>
<style type="text/css">
h2.pos_left
{
position:relative;
left:-20px
}
h2.pos_right
{
position:relative;
left:20px
}
</style>
</head>

<body>
<h2>This is a heading in normal position</h2>
<h2 class="pos_left">This heading is moved left to its normal position</h2>
<h2 class="pos_right">This heading is moved right to its normal position</h2>
<p>Relative positioning moves an element RELATIVE to its original position.</p>
<p>The style "left:-20px" subtracts 20 pixels from the element's original left position.</p>
<p>The style "left:20px" adds 20 pixels to the element's original left position.</p>
</body>
</html>
```



This is a heading in normal position

This heading is moved left to its normal position

This heading is moved right to its normal position

Relative positioning moves an element RELATIVE to its original position.

The style "left:-20px" subtracts 20 pixels from the element's original left position.

The style "left:20px" adds 20 pixels to the element's original left position.

http://www.w3schools.com/css/pr_class_position.asp

```

p.one
{
  position:fixed;
  left:5px;
  top:5px;
  background: red;
}

```

```

p.two
{
  position:fixed;
  top:30px;
  right:5px;
  background: red;
}

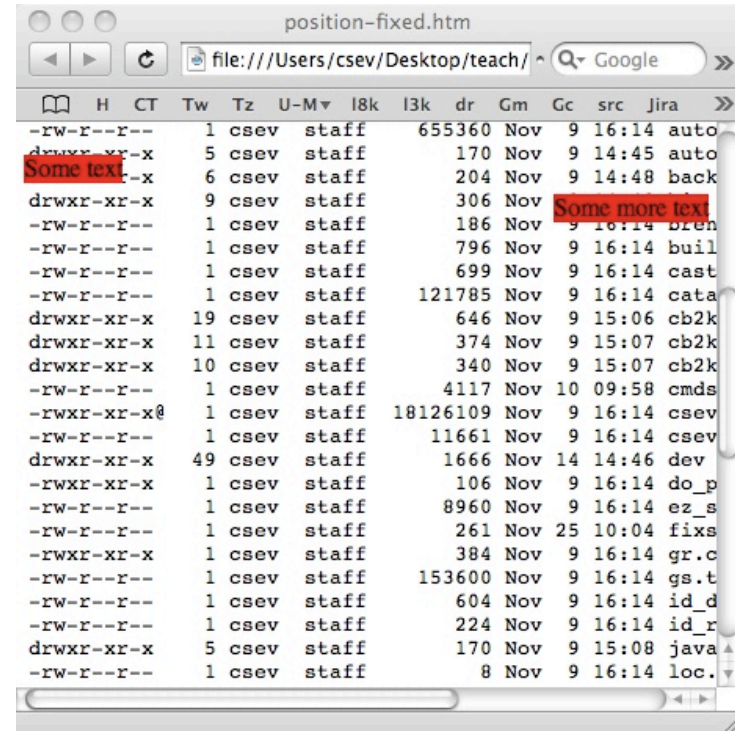
```

```

<p class="one">Some text</p>
<p class="two">Some more text</p>

```

http://www.w3schools.com/css/pr_class_position.asp



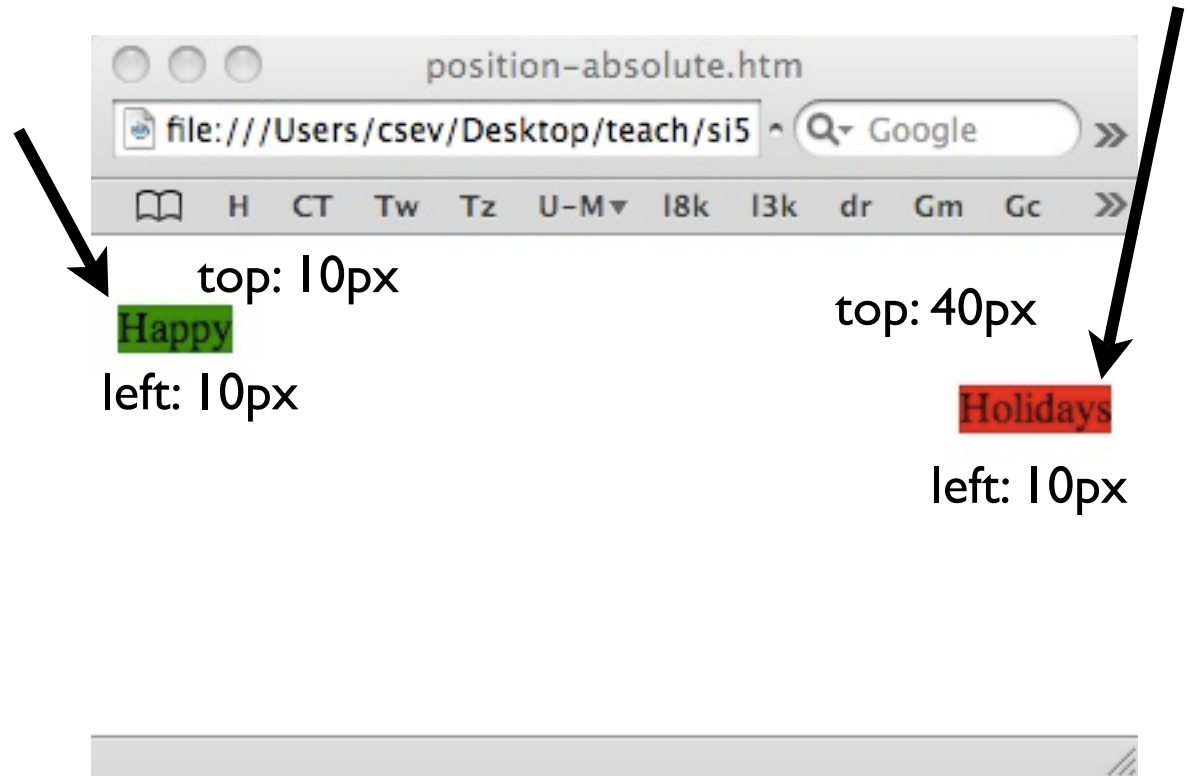
Fixed is relative to browser window
so it hovers over the document.

```

p.one
{
  position:absolute;
  left:10px;
  top:10px;
  background: green;
}
p.two
{
  position:absolute;
  top:40px;
  right:10px;
  background: red;
}

<p class="one">Happy</p>
<p class="two">Holidays</p>

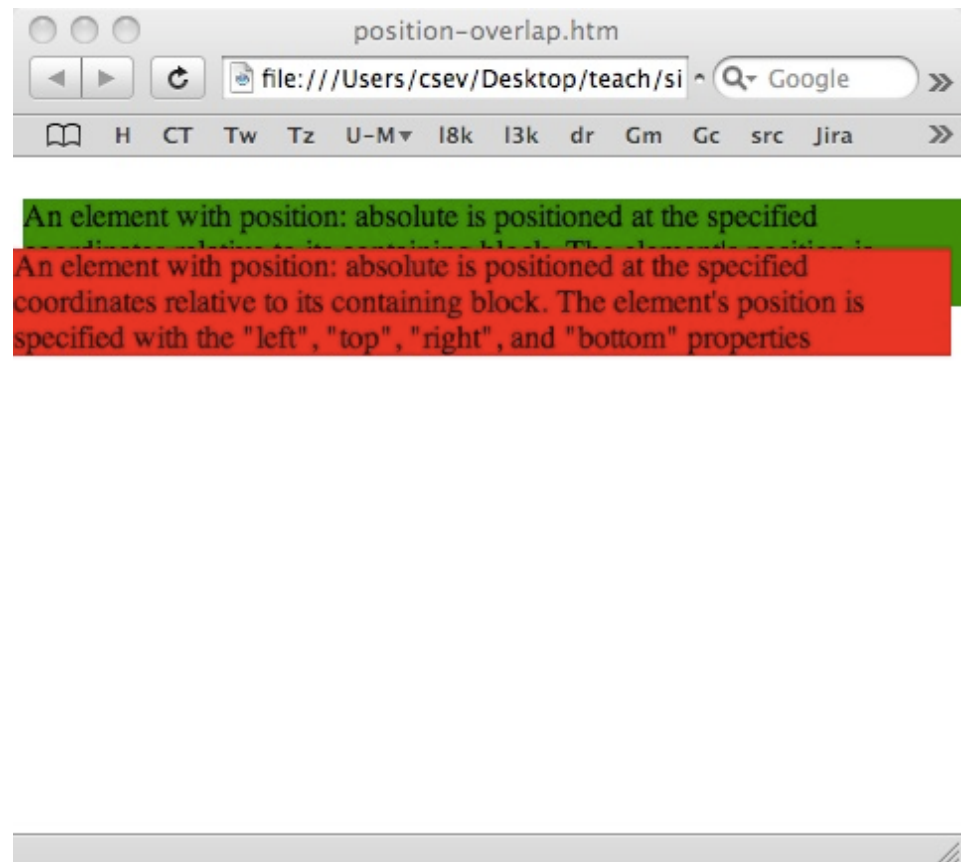
```



Absolute is relative to the document so as you scroll through the document - absolute blocks move with the rest of the document.

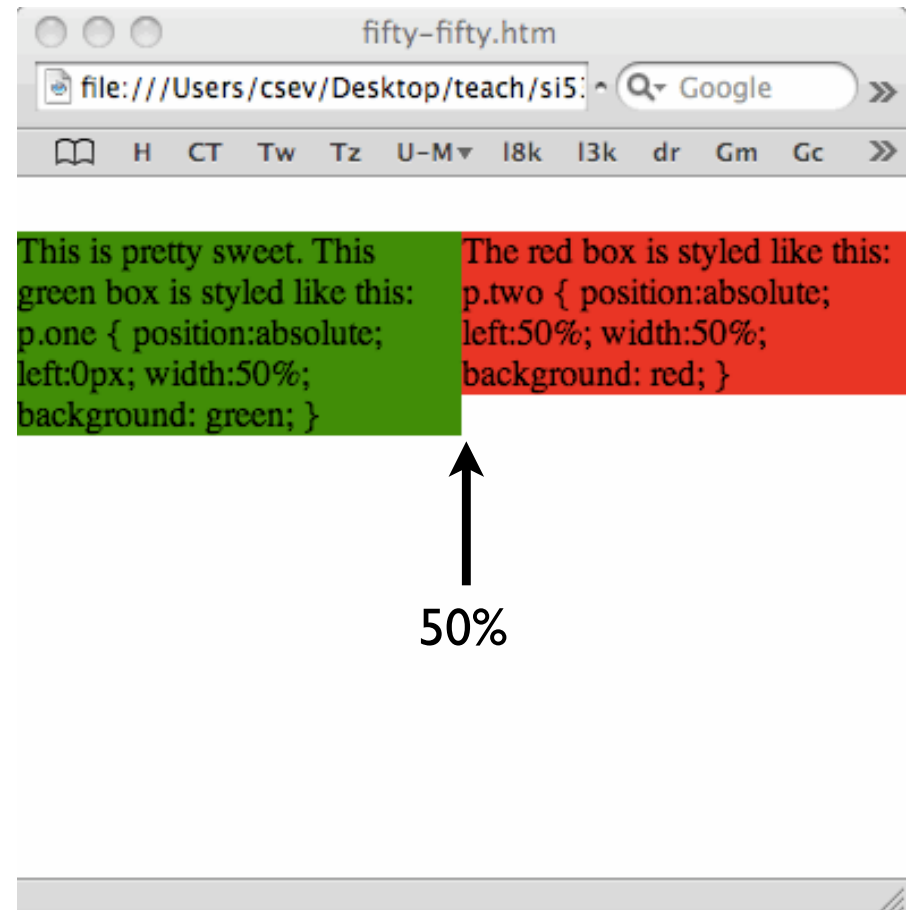
Absolute Overlap

- Absolute positioning is cool and makes it so browser can layout the page with its “eyes closed”
- Browser is doing what we told it to do - we as designers must do the “thinking” and make sure that if the browser follows our instructions - it will look good



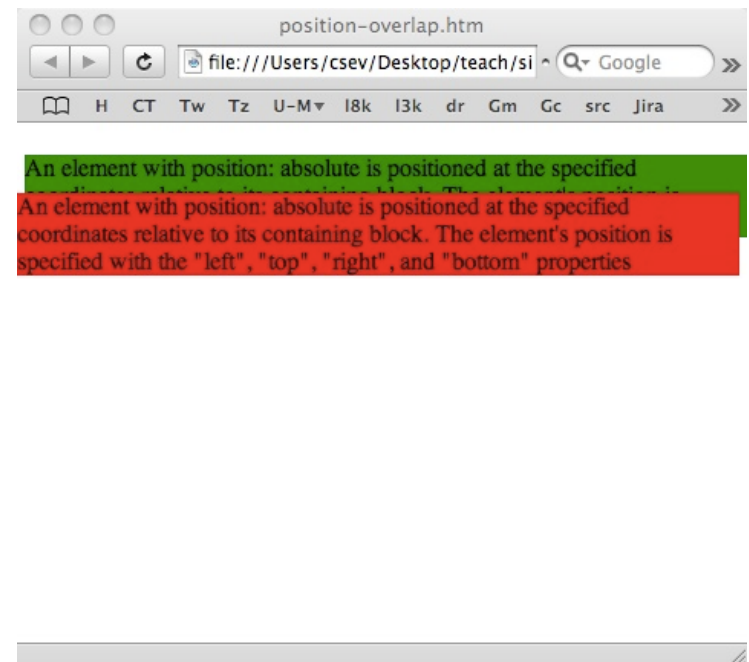

```
p.one
{
  position:absolute;
  left:0%;
  width:50%;
  background: green;
}
p.two
{
  position:absolute;
  left:50%;
  width:50%;background: red;
}
```

Using percentages instead of pixels.



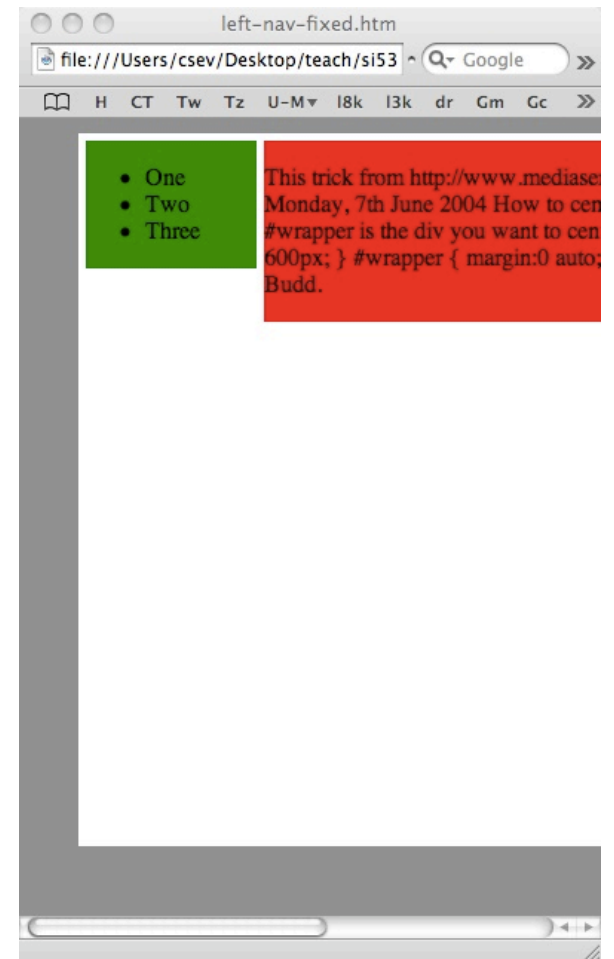
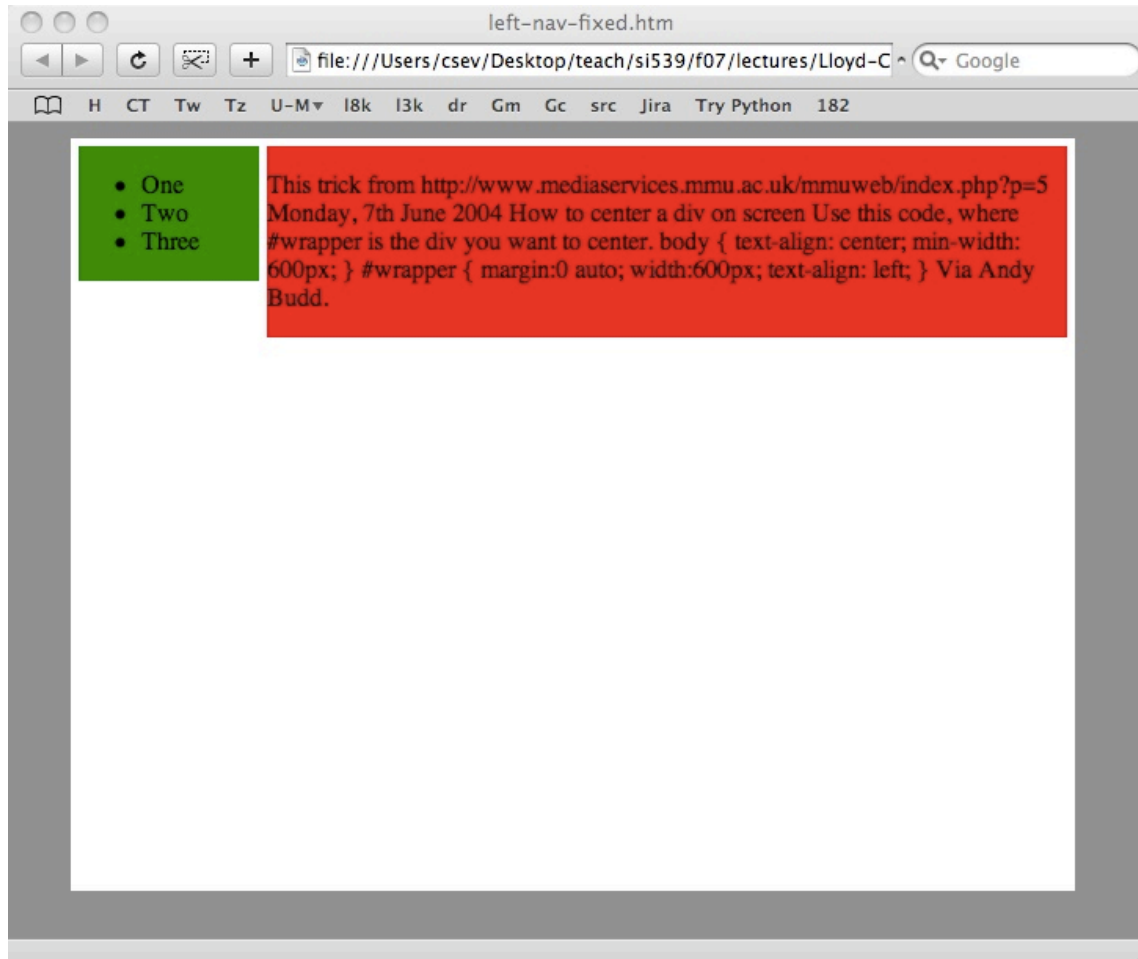
z-Index - Front to back

- Can be used when position is absolute
- Can be used to show and hide divs
- z-index - When there is overlap show the element with the highest z-index
- Overlap can be partial



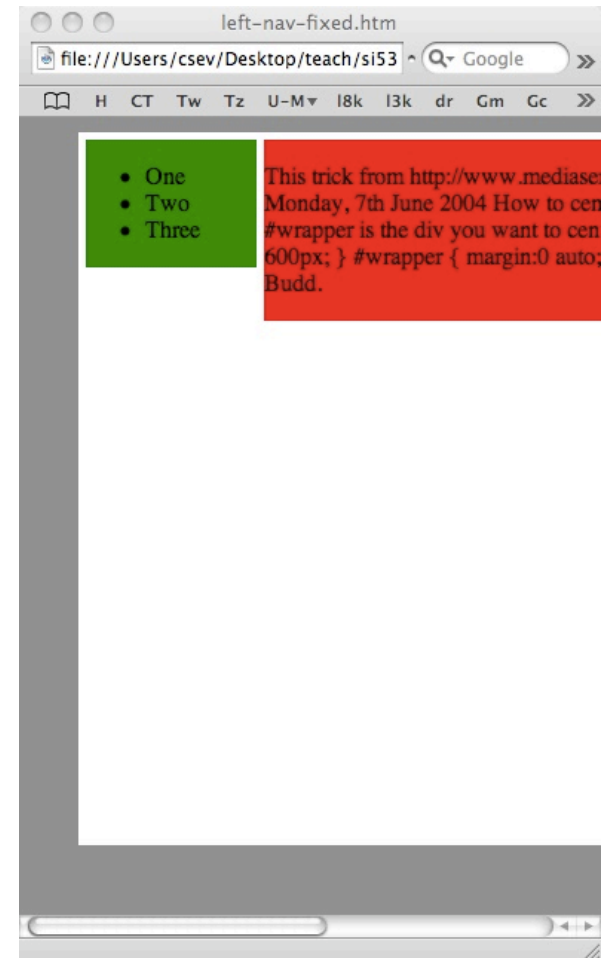
Pre-Calculated Layout

- Kind of like “print layout” - control everything - text flow / justification looks the same every time. Gives very polished feel.
- Looks the same on resize - some of the screen is simply not visible



```
body {  
  background: grey;  
}  
  
#wrapper {  
  position: absolute;  
  top: 10px;  
  left: 40px;  
  min-height: 480px;  
  min-width: 640px;  
  text-align: left;  
  background: white;  
}
```


```
#nav {  
  position: absolute;  
  top: 5px;  
  left: 5px;  
  width: 115;  
  background: green;  
}  
  
#content {  
  position: absolute;  
  top: 5px;  
  left: 125px;  
  width: 510px;  
  background: red;  
  vertical-align: top;  
}
```



```
<body>
<div id="wrapper">
  <div id="nav">
    <ul>
      <li>One</li>
      <li>Two</li>
      <li>Three</li>
    </ul>
  </div>
  <div id="content">
    <p>
      This trick from
      http://www.mediaservices.mmu.ac.uk/mmuweb/index.php?p=5
      Monday, 7th June 2004
    </p>
  </div>
</div>
</body>
```

Markup Mechanics

- There is an art to designing markup to be skinned - you want to give designers plenty of control in the changing the look and feel.
- Two basic needs
 - Semantically markup your content
 - Container divs allow designers to grab and place objects at different nesting levels


Toozyday Personal Learning Environment (11.0)

You are logged in as admin ([logout](#))

[Refresh \(2 Sites\)](#)
[My Profile](#)
[Users](#)
[Sites](#)
[Fun](#)
[Site # 2](#)

You can choose which site to visit by clicking on the site's link above.

For good time, try out the new [iPhone look portal](#).

The portal shows two tools at a time using Ajax and they operate independently. Site tools work within the context of that site.



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Add Account

Name	Login	Password	Email	Actions
Admin	admin	admin	sjsjsj	View/Edit Delete
csec	csev	p		View/Edit Delete
x	y	z		View/Edit Delete

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The portal shows two tools at a time using Ajax and they operate independently. Site tools work within the context of that site.

Inspiration



<http://www.csszengarden.com/>

Summary

- CSS Layout is its own art and science
- CSS Basics are well established and well supported in all modern browsers
- The box model is pretty straightforward - and allows nice design within the standards with reasonable effort levels.
- Site layout and markup is further evolving - mostly to make it increasingly possible to support desktop like experiences on the web.
- These innovations will naturally cause incompatibilities - which make things interesting and frustrating at times.